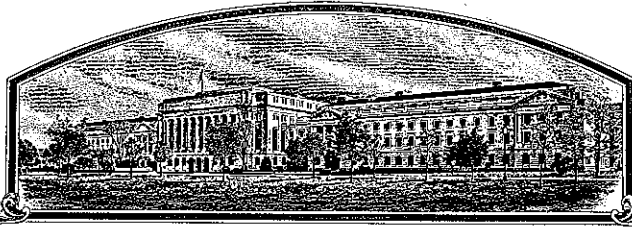


No.



9500143

# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

**DEKALB Genetics Corporation**

Whereas, THERE HAS BEEN PRESENTED TO THE

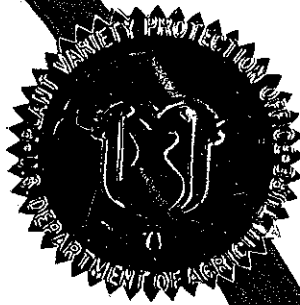
**Secretary of Agriculture**

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

ALFALFA

'DK127'



Attest:

*Ann Marie*

Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

*In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this thirtieth day of July in the year of our Lord one thousand nine hundred and ninety-nine.*

*Jan Gilman*

Secretary of Agriculture

DUCE LOCALLY. Include form number and date on all reproductions.

FORM APPROVED - OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE DIVISION - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a).

**APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE**  
(Instructions and information collection burden statement on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) <b>DEKALB Genetics Corporation</b>		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER  <b>III</b>	3. VARIETY NAME  <b>DK127</b>
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) <b>3100 Sycamore Road DeKalb, IL 60115</b>		5. TELEPHONE (include area code) <b>(815) 758-3461</b>	<b>FOR OFFICIAL USE ONLY</b> PVPO NUMBER <b>9500143</b> DATE <b>APRIL 20, 1995</b> FILING AND EXAMINATION FEE <b>\$2350 - \$100.00</b> DATE <b>04/17/95</b> CERTIFICATION FEE <b>\$360.00</b> DATE <b>6/17/99</b>
6. FAX (include area code) <b>(815) 756-2094</b>		6. FAX (include area code) <b>(815) 756-2094</b>	
7. GENUS AND SPECIES NAME <b>Medicago Sativa</b>	8. FAMILY NAME (Botanical) <b>Leguminosae</b>		
9. CROP KIND NAME (Common name) <b>Alfalfa</b>			
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (Common name) <b>Corporation</b>			
11. IF INCORPORATED, GIVE STATE OF INCORPORATION <b>Delaware</b>		12. DATE OF INCORPORATION <b>June 15, 1988</b>	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS			
Robert E. Roman, Jr. DEKALB Genetics Corporation 3100 Sycamore Road DeKalb, IL 60115		R. Mark Lawson, Ph.D. DEKALB Genetics Corporation 3100 Sycamore Road DeKalb, IL 60115	
14. TELEPHONE (include area code) <b>(815) 758-3461</b>		15. FAX (include area code) <b>(815) 756-2094</b>	
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)			
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety			
b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness			
c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety			
d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety			
e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Applicant's Ownership			
f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in a public repository)			
g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO)			
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act?) <input type="checkbox"/> YES (If "yes," answer items 18 and 19 below) <input checked="" type="checkbox"/> NO (If "no," go to item 20)			
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input checked="" type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED	
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES (If "yes," give names of countries and dates) <input type="checkbox"/> NO <b>November 1994</b>			
21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF APPLICANT (Owner(s)) <b>R. Mark Lawson</b>		SIGNATURE OF APPLICANT (Owner(s))	
NAME (Please print or type) <b>R. Mark Lawson</b>		NAME (Please print or type)	
CAPACITY OR TITLE <b>Director, Research Operations</b>	DATE <b>5-2-95</b>	CAPACITY OR TITLE	DATE

APPLICATION FOR PLANT VARIETY PROTECTION  
DK127 ALFALFA

**Exhibit A. Origin and Breeding History of the Variety**

DK127 is a synthetic variety with 161 parent plants. Parents were selected from a cross between two breeding lines for multifoliolate leaf expression and combined resistance to *Aphanomyces* root rot (race 1) and *Phytophthora* root rot. One line traces to selections from a four-year-old Minnesota yield trial and the other to a winterhardy multifoliolate population selected for vigor, persistence, forage quality, and resistance to one or more of the following pests: bacterial wilt, *Fusarium* wilt, *Verticillium* wilt, anthracnose (race 1), *Phytophthora* root rot, and *Aphanomyces* root rot (race 1). Phenotypic recurrent selection was used. Parentage traces to the following cultivars: Pacesetter (35%), Legendairy (20%), Encore (20%), Alfaleaf (15%), Prism (5%), and DK133 (5%). Breeder seed (Sn1) was produced near Caldwell, Idaho, in 1992. Breeder seed was harvested as the bulk from all plants.

Pacesetter is a synthetic variety with 86 parents selected for multifoliolate expression, winter-hardiness in a 3-year-old Wisconsin nursery, and resistance to one or more of the following pests: bacterial wilt, *Verticillium* wilt, *Phytophthora* root rot, anthracnose, *Leptosphaerulina* leafspot, and spotted alfalfa aphid. The following germplasm sources were used in the development of Pacesetter: DK122 (30%), Crown II (20%), Multi-plier (20%), 2833 (10%), G-2841 (10%), Olds 98 (10%), Breeder seed (Syn1) was produced in cage isolation in 1988.

Pacesetter was favorably reviewed by the NAVRP in 1991.

**Exhibit B. Statement of Distinctness**

The variety most similar to DK127 is MP2000. DK127 is distinct from MP2000 in the following character:

Fusarium wilt resistance = resistant (R) for DK127  
= highly resistant (HR) for MP2000.

Fusarium Wilt Test (Forage Genetics, 1993):

<u>VARIETY</u>	<u>% RESISTANCE</u>	<u>ADJUSTED %R</u>	<u>ASI</u>
<b>DK127</b>	35	36	1.84
MP2000	67	68	1.01
Agate	53	54	1.61
MNGN-1	5	5	4.25
LSD (.05)	17.1		.051
C.V.(%)	19.7		8.88

U.S. DEPARTMENT OF AGRICULTURE  
 AGRICULTURAL MARKETING SERVICE  
~~COMMODITIES SCIENTIFIC SUPPORT DIVISION~~  
 BELTSVILLE, MARYLAND 20705

EXHIBIT C  
(Alfalfa)

OBJECTIVE DESCRIPTION OF VARIETY  
 ALFALFA (*Medicago sativa* sensu Gunn et al.)

NAME OF APPLICANT(S) <b>DEKALB Genetics Corporation</b>	TEMPORARY DESIGNATION <b>3B37</b>	VARIETY NAME <b>DK127</b>
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code) <b>3100 Sycamore Rd. DeKalb, IL 60115</b>		FOR OFFICIAL USE ONLY PVPO NUMBER <b>9500143</b>

PLEASE READ ALL INSTRUCTIONS CAREFULLY: Place numbers in the boxes to designate the expressions which are characteristic of the commercial generations of the application variety. Data for quantitative plant characters should be based on a minimum of 100 plants. Include leading zeros when necessary (e.g., 0 8 9) for quantitative data. Comparative data should be determined from varieties entered in the same trial. Plant color may be precisely designated by using any recognized color chart, e.g., The Munsell Plant Tissue Color Charts.

## 1. WINTERHARDINESS:

8

CLASS:

- |  |                                      |
|--|--------------------------------------|
| 1 = Very Non-Winterhardy (CUF 101)           | 2 = Non-Winterhardy (Moapa 69)       |
| 3 = Intermediately Non-Winterhardy (Mesilla) | 4 = Semi-Winterhardy (Lahontan)      |
| 5 = (Du Puits)                               | 6 = Moderately Winterhardy (Saranac) |
| 7 = (Ranger)                                 | 8 = Winterhardy (Vernal)             |
| 9 = Extremely Winterhardy (Norseman)         |                                      |

TEST LOCATION: West Salem, Wisconsin

## 2. FALL DORMANCY:

## FALL DORMANCY (DETERMINED FROM SPACED PLANTINGS)

TESTING INSTITUTION AND LOCATION	DATE OF LAST CUT	DATE REGROWTH SCORED	REGROWTH SCORE OR AVERAGE HEIGHT				LSD .05
			APPLICATION VARIETY	CHECK VARIETIES*			
				Vernal	Ranger	Saranac	
Forage Genetics West Salem, Wisc.	9/94	10/94	13.9	8.0	13.4	16.8	2.6

\* CUF 101, Moapa 69, Mesilla, Lahontan, Du Puits, Saranac, Ranger, Vernal, or Norseman as appropriate.

Specify scoring system used: inches of regrowth5

Fall Growth Habit (Determined from Fall Dormancy Trials)

- |                            |                          |                            |
|----------------------------|--------------------------|----------------------------|
| 1 = Erect (CUF 101)        | 3 = Semierect (Mesilla)  | 5 = Intermediate (Saranac) |
| 7 = Semidecumbent (Vernal) | 9 = Decumbent (Norseman) |                            |

## 3. RECOVERY AFTER FIRST SPRING CUT (In Southwest, first cut after March 21):

3

- |                          |                    |                           |                   |
|--------------------------|--------------------|---------------------------|-------------------|
| 1 = Very Fast (CUF 101)  | 3 = Fast (Saranac) | 5 = Intermediate (Ranger) | 7 = Slow (Vernal) |
| 9 = Very Slow (Norseman) |                    |                           |                   |

TEST LOCATION: West Salem, Wisconsin4. AREAS OF ADAPTATION IN U.S. (Where tested and proven adapted): 22 666 13 WI 201

Primary Area of Adaptation

26

Other Areas of Adaptation

- |  |                               |               |
|--|-------------------------------|---------------|
| 1 = North Central                        | 2 = East Central              | 3 = Southeast |
| 5 = Moderately Winterhardy Intermountain | 6 = Winterhardy Intermountain |               |
| 8 = Other (Specify) _____                |                               |               |

- |                  |                  |
|------------------|------------------|
| 4 = Southwest    | 5 = Great Plains |
| 7 = Great Plains |                  |



## 5. FLOWERING DATE (When 10% of plants possess open flowers at time of first spring cut):

0 2

Days Earlier Than

3

Same As

1 = CUF 101

2 = Mesilla

3 = Saranac

4 = Vernal

5 = Norseman

Days Later Than

TEST LOCATION: West Salem, Wisconsin

## 6. PLANT COLOR (Determined from healthy regrowth 3 weeks after first spring cut, controlling leafhoppers if necessary):



1 = Very Dark Green (524)

2 = Dark Green (Vernal)

3 = Light Green (Ranger)

COLOR CHART VALUE (Specify chart used; \_\_\_\_\_)

APPLICATION VARIETY: \_\_\_\_\_

VERNAL: \_\_\_\_\_

TEST LOCATION: West Salem, Wisconsin

## 7. CROWN TYPE (Determined from spaced plantings):



Noncreeping Types:

1 = Broad (Vernal)

2 = Intermediate (Saranac)

3 = Narrow (CUF 101)

Creeping Types:

4 = Creeping Rooted (Rangelander)

5 = Rhizomatous (Rhizoma)

## 8. FLOWER COLOR (Determine frequency of plants for each color class as defined by USDA Agricultural Handbook No. 424 (Barnes 1972), allowing all plants in plot to flower):

☐ 7 ☐ 9

% Purple and Violet (Subclasses 1.1 to 1.4)

☐ 1 ☐ 0

% Blue (Subclasses 2.3 and 2.4)

☐ 1 ☐ 1

% Variegated Other Than Blue (Subclasses 2.1, 2.2, 2.5 to 2.9)

☐ ☐ ☐

% Yellow (Subclasses 4.1 to 4.4)

☐ ☐ ☐

% Cream (Class 3)

☐ ☐ ☐

% White (Class 5)

TEST LOCATION: Nampa, ID

## 9. POD SHAPE (Determine frequency of plants with the following pod shapes produced on well cross-pollinated racemes):

☐ 1 ☐ 0 ☐ 0

% Tightly Coiled (One or more coils, center more or less closed)

☐ ☐ ☐

% Loosely Coiled (One or more coils, center conspicuously open)

☐ ☐ ☐

% Sickle (Less than 1 coil)

TEST LOCATION: Nampa, ID

10. PEST RESISTANCE: Provide in the appropriate column, trial data for application variety, and resistant (R) and susceptible (S) check varieties, synthetic generation tested, average severity index scores (ASI), least significant difference statistics (LSD .05), the institution in charge of test, year, and location of test, and whether test is a field or laboratory evaluation. Describe scoring system, and any test procedure which differs from standard methods proposed by Elgin (1982). Trial data from other test years or locations should be presented whenever available on a separate document as Exhibit D. Seeds of the check varieties and germplasm lines listed below can be obtained from the USDA Field Crops Laboratory, Bldg. 001, Rm. 335, BARC-West, Beltsville, MD 20705. Although comparisons with check varieties listed below are preferred, comparisons with any appropriate check variety recommended by Elgin (1982) may be presented.

## A. DISEASE RESISTANCE:

A. DISEASE RESISTANCE:	DISEASE	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Anthrachnose, Race 1 ( <i>Colletotrichum trifolii</i> )	Application		1	60	120		9.8	1992 Forage Genetics West Salem, Wisconsin lab test
	Arc (R)		60	120				
	Saranac (S)		60	120				
	SCORING SYSTEM: Seedling Survival							
Anthrachnose, Race 2 ( <i>Colletotrichum trifolii</i> )	Application							
	Saranac AR (R)							
	Arc (S)							
	SCORING SYSTEM: 22 VBB 13 101 20							
Bacterial Wilt ( <i>Corynebacterium insidiosum</i> )	Application		2	54	100	1.60	0.24	1994 Forage Genetics West Salem, Wisconsin field test
	Vernal (R)		33	100	2.38			
	Narragansett (S)		3	100	3.68			
	SCORING SYSTEM: as per standard test							
Common Leafspot ( <i>Pseudopeziza medicaginis</i> )	Application							
	MSA-CW3AN3 (R)							
	Ranger (S)							
	SCORING SYSTEM:							

## 10. A. PEST RESISTANCE (Continued):

9500143

DISEASE	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY		
Downy Mildew ( <i>Peronospora trifoliorum</i> )	Application								
Isolate, if known:	Saranac (R)								
	Kanza (S)								
	SCORING SYSTEM:								
Fusarium Wilt ( <i>Fusarium oxysporum</i> <i>f. medicaginis</i> )	Application	1	35	120	1.84	0.51	1993 Forage Genetics Nampa, ID lab test		
	Moapa 69 (R) Agate (R)		53	120	1.61				
	Narragansett (R)		5	120	4.25				
	SCORING SYSTEM:								
	as per standard test								
Phytophthora Root Rot ( <i>Phytophthora megasperma</i> <i>f. medicaginis</i> )	Application	1	67	120		17.1	1992 Forage Genetics West Salem, Wisconsin lab test		
	Agate (R)		38	120					
	Saranac (S)		0	120					
	SCORING SYSTEM:								
	Seedling survival								
Verticillium Wilt ( <i>Verticillium albo-atrum</i> )	Application	1	26	120	3.27	0.45	1993 Forage Genetics Nampa, ID lab test		
	Vertus (R)		30	120	2.78				
	Saranac (S)		3	120	4.02				
	SCORING SYSTEM:								
	as per standard test								
Other (Specify)	Application	1	48	120		12.8	1992 Forage Genetics West Salem, Wisconsin lab test		
Aphenomyces root rot	(R) WAPH 1 (R)		42	120					
(Aphenomyces eutoiches)	(S) Agate (S)		0	120					
	SCORING SYSTEM:								
	seedling survival								
Other (Specify)	Application								
	(R)								
	(S)								
	SCORING SYSTEM:								
B. INSECT RESISTANCE:	VARIETY	SYN. GEN. TESTED	PERCENT DEFOLIATION	DEFOLIATION IN PERCENT OF RESISTANT CHECK	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY		
Alfalfa Weevil ( <i>Hypera postica</i> )	Application								
	Arc (R)			100					
	Saranac (S)								
	SCORING SYSTEM:								

## 10. B. INSECT RESISTANCE (Continued):

INSECT	VARIETY	SYN. GEN. TESTED	PERCENT SEEDLING SURVIVAL	NUMBER OF SEEDLINGS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Blue Alfalfa Aphid ( <i>Acyrtosiphon kondoi</i> )	Application						
	CUF 101 (R)						
	PA-1 (S)						
	SCORING SYSTEM:						
Pea Aphid ( <i>Acyrtosiphon pisum</i> )	Application	1	61	120		15.2	1993 Forage Genetics Nampa, ID lab test
	Kanza (R)		39	120			
	Ranger (S)		8	120			
	SCORING SYSTEM:						
Spotted Alfalfa Aphid ( <i>Therioaphis maculata</i> )  Biotype, if known:	Application	1	50	120		13.1	1994 Forage Genetics Nampa, ID lab test
	Kanza (R)		45	120			
	Ranger (S)		1	120			
	SCORING SYSTEM: as per standard test						
INSECT	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Potato Leafhopper Yellowing ( <i>Empoasca fabae</i> )	Application						
	MSA-CW3An3 (R)						
	Ranger (S)						
	SCORING SYSTEM:						
Other (Specify)	Application						
	(R)						
	(S)						
	SCORING SYSTEM:						
C. NEMATODE RESISTANCE:							
NEMATODE	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Northern Root Knot ( <i>Meloidogyne hapla</i> )	Application	1	40	120	2.68	0.61	1993 Forage Genetics Nampa, ID lab test
	Nev. Syn. XX (R)		80	120	1.60		
	Lahontan (S)		3	120	3.32		
	SCORING SYSTEM: as per standard test						

## 10. C. NEMATODE RESISTANCE (Continued):

NEMATODE	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY:	
Southern Root Knot ( <i>Meloidogyne incognita</i> )	Application							
	Moapa 69 (R)							
	Lahontan (S)							
	SCORING SYSTEM:							
Stem Nematode ( <i>Ditylenchus dipsaci</i> )	Application	1	25	120	3.72	0.52	1993 Forage Genetics Nampa, ID lab test	
	Lahontan (R)		34	120	3.03			
	Ranger (S)		5	120	3.92			
	SCORING SYSTEM:							
as per standard test								
Other (Specify)	Application							
	(R)							
	(S)							
	SCORING SYSTEM:							

## 11. INDICATE THE VARIETY THAT MOST CLOSELY RESEMBLES THE APPLICATION VARIETY FOR EACH OF THE FOLLOWING CHARACTERS:

CHARACTER	VARIETY	CHARACTER	VARIETY
Winterhardiness	Vernal	Plant Color	Dart
Recovery After 1st Cut	5454	Crown Type	DK122
Area of Adaptation	5312	Combined Disease Resistance	DK133
Flowering Date	DK133	Combined Insect Resistance	DK133

## REFERENCES

Barnes, D.K. 1972. A System for Visually Classifying Alfalfa Flower Color. U.S. Dep. Agric. Handb. 424. 18 pp. (Note: Greenish cast of plate 6, A and B is an artifact of printing, actual colors a blend of yellow and white.)

Elgin, J.H., Jr., (ed.). 1982. Standard Tests to Characterize Pest Resistance in Alfalfa Cultivars. U.S. Dep. Agric. Tech. Bull. (In Press).

Gunn, C.R., W.H. Skrdla, and H.C. Spencer. 1978. Classification of *Medicago sativa* L. using legume characters and flower colors. U.S. Dep. Agric. Tech. Bull. 1574. 84 pp.

Munsell Color Co. 1977. Munsell Plant Tissue Color Charts. Munsell Color Co., Inc. Baltimore.

NOTE: Any additional descriptive information and supporting documentation may be provided as Exhibit D.



9500143

APPLICATION FOR PLANT VARIETY PROTECTION  
DK127 ALFALFA

**Exhibit D Supplement. Additional Description of Variety**

**APHANOMYCES ROOT ROT (Race 1) RESISTANCE**

(Lab tests conducted by Forage Genetics, West Salem, WI):

VARIETY NAME OR EXPERIMENTAL DESIGNATION)	UNADJUSTED PERCENT RESISTANCE	ADJUSTED PERCENT RESISTANCE	MOST SIMILAR VARIETY
<b>DK127</b>	<b>54.7</b>	<b>56.9</b>	<b>Ranger</b>
Oneida	1.3	1.4	
Cimarron	2.2	2.3	
Honoye	0.0	0.0	
Rere	0.0	0.0	
Answer	0.9	0.9	
Apollo	1.1	1.1	
Anchor	0.0	0.0	
Arrow	1.7	1.8	
WL 317	0.0	0.0	
2833	1.9	2.0	
(DS 764)	(2.8)*	(2.6)*	Lahontan
Precedent	33.0	34.3	Saranac
13 R Supreme	0.0	0.0	
WAPH-1 (resistant check)	48.1	50.0	
Saranac (susceptible check)	0.6	0.6	
Test mean (n=29 entries)	11.4	11.0	
lsd 0.05	8.7	8.5	
CV%	10.1	9.4	

\* Seed not available to the applicant for this experimental. DS 764 data has been provided by its developer, Dairyland Seed

(Lab Test conducted by Dairyland Seeds, Clinton, WI):

VARIETY NAME OR EXPERIMENTAL DESIGNATION)	UNADJUSTED PERCENT RESISTANCE	ADJUSTED PERCENT RESISTANCE	MOST SIMILAR VARIETY
DS 764	2.8	2.6	Lahontan
WAPH-1 (Resistant check)	53.0	50.0	
Agate (Susceptible check)	0.0	0.0	
Test mean	28.0	26.4	
LSD .05	7.8	7.3	
C.V. (%)	11.6	11.6	

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U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE**EXHIBIT E**  
**STATEMENT OF THE BASIS OF OWNERSHIP**

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)  DEKALB Genetics Corporation	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER  9500143 AAA 08 Apr 1999	3. VARIETY NAME  DK127
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)  3100 Sycamore Road DeKalb, IL 60115	5. TELEPHONE (include area code)  (815) 758-3461	6. FAX (include area code)  (815) 758-4106
	7. PVPO NUMBER  9500143	
8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain.  <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
9. Is the applicant (individual or company) a U.S. national or U.S. based company? If no, give name of country _____  <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
10. Is the applicant the original owner? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If no, please answer the following:  a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)? <input type="checkbox"/> YES <input type="checkbox"/> NO If no, give name of country _____  b. If original rights to variety were owned by a company, is the original owner(s) a U.S. based company? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no, give name of country _____		
11. Additional explanation on ownership (If needed, use reverse for extra space):		

**PLEASE NOTE:**

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA Office of Communications at (202) 720-5881 (voice) or (202) 720-7808 (TDD). To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

At first flower in autumn approximately 90% of the plants in DK127 show multifoliolate leaf expression. This variety also shows exceptional winter survival compared with varieties with similar fall dormancy.

**Exhibit E. Statement of the Basis of the Applicant's Ownership**

DEKALB Genetics Corporation has purchased sole rights to variety DK127 from the originator.

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